

REMARKS

Prior to this Amendment, Claims 1-17, 30-32 and 40-46 were pending in this application. With this Amendment, Claim 1 is being amended, Claim 16 canceled, and new Claim 59 added. Thus, after entry of this Amendment, Claims 1-15, 17, 30-32, 40-46, and 59 are pending and under consideration.

Claim 1 is amended to incorporate the limitation recited in Claim 16. Claim 16 is accordingly canceled. New Claim 59 is added to recite that the anti-vibration means prevents vibrations of the apparatus such that a thickness of a wet film of the LLC oriented by the at least one system for applying the orienting force is within the range of from 5 μm to 10 μm . Support for new Claim 59 can be found for example in the Specification at page 7, line 14, and page 7, line 29-page 8, line 17. Thus, no new matter is added by this amended.

Claims 1-3, 5, 7, 9, 11, 12, 14-17, and 30-32 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bobrov *et al.* in view of Ardley *et al.*

Claims 40-42 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bobrov *et al.* in view of Ardley *et al.* and further in view of Fenoglio *et al.*

Claims 43-46 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bobrov *et al.* in view of Ardley *et al.* and Fenoglio *et al.* and further in view of Doan.

Claims 1-7, 9, 11-17, and 30 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bobrov *et al.* in view of Hughes.

Claims 8 and 10 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bobrov *et al.* and Hughes and further in view of Shelanski *et al.*

Claims 40-42 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bobrov *et al.* and Hughes and further in view of Fenoglio *et al.*

Applicant traverses the rejections and submits that the instant claims are patentable over the cited art.

As the Examiner knows, to establish a proper *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify or combine the cited reference relied upon by the Examiner to arrive at the claimed

invention. Second, there must be a reasonable expectation that the suggested modification or combination would be successful. Finally, the prior art reference (or references when combined) must teach or suggest each and every limitation of the rejected claims. The teaching or suggestion to make the claimed modification or combination and the reasonable expectation of success must both be found in the prior art, and not based upon in the applicant's disclosure. M.P.E.P. §706.02. Applicants respectfully submit that a *prima facie* obviousness has not been established and the invention recited in the instant claims are patentable over the cited references.

Claim 1 recites an apparatus for formation of polarizers from a lyotropic liquid crystal (LLC) of at least one organic compound. The apparatus comprises at least one system for applying the LLC onto at least one substrate supported on a substrate holder, at least one system for applying orienting force on the LLC, a moving means for moving said systems for applying the LLC and for applying orienting force relative to said substrate holder, and at least one anti-vibration means for preventing vibration of the apparatus. The at least one system for applying orienting force comprises at least one plate, one end of which is fixed such that during relative movement of the plate and the substrate holder at least a part of the plate's surface travels unrestricted over the surface of the applied LLC providing an external orienting force on the LLC.

Bobrov *et al.* do not teach or suggest, as the Examiner correctly indicated, a system for applying orienting force comprising at least one plate, one end of which is fixed such that during relative movement of the plate and the substrate holder at least a part of the plate's surface travels unrestricted over the surface of the applied LLC providing an external orienting force on the LLC.

Ardley *et al.* teach a flap device used in an apparatus for applying fluid to a bulk commodity such as wheat, barley, oats, sorghum, maize and oil seed etc. Ardley *et al.* pertains to a non-analogous art and is far remotely related to liquid crystal display art. There is no motivation for one of ordinary skill to combine the apparatus used in treating a bulk commodity such as wheat oak and old seed taught in Ardley *et al.* with apparatus used in liquid crystal display taught in Bobrov *et al.* Further, Ardley *et al.* do not teach or suggest an anti-vibration means for preventing vibration of the apparatus. Thus, even assuming, *arguendo*, that one of ordinary skill would attempt to combine Bobrov *et al.* with Aedley *et al.*, the combination would not arrive at the apparatus recited in Claim 1. The flap device taught by Ardley *et al.* is clad at

one end with a sheet of metal which serve to maintain that end of the flap device in a flap condition. A steel bar is secured to the free end of the flap device and serves to hold the device against the surface of the grain during passage of the conveyor. Col. 3, lines 58-64. Ardley *et al.* do not teach or suggest that the apparatus includes an anti-vibration means for preventing vibration of the apparatus.

Nor does Hughes teach or suggest an anti-vibration means for preventing vibration of the apparatus. In Hughes, a doctor blade portion (26) might be seen as to be connected to an air cylinder (36). To supply polymer (18), the air cylinder (36) drives scoop means (24) and a plate (22) to control an area of an opening (44), which is not an anti-vibration means. Furthermore, Hughes does not teach or suggest a plate for applying an orientating force. Thus, even assuming, *arguendo*, one of ordinary skill would attempt to combine Bobrov *et al.* with Hughes, the combination cannot arrive at the apparatus recited in instant Claim 1.

Accordingly, Applicant respectfully submits that instant Claim 1 is patentable over the cited art. Reconsideration of the rejection of Claim under 35 U.S.C. 103(a) over Bobrov *et al.* in view of Ardley *et al.*, or over Bobrov *et al.* in view of Hughes is respectfully requested.

Claims 2-15, 17, 30-32, 40-46, and 59 depend on Claim 1. They are therefore allowable over the cited art for at least the same reasons as for Claim 1.

Moreover, none of the cited references teach or suggest that the system for applying the LLC is implemented as at least one fixed roller, which is moveable to force the plate to the LLC recited in instant Claim 14 (e.g., FIG 3). The Examiner argued that Ardley *et al.* or Hughes, have taught Claim 14. Applicant respectfully disagrees. In addition to the different technical fields, neither Ardley *et al.* nor Hughes teach or suggest that the system for applying the LLC is implemented as at least one fixed roller, which is moveable to force the plate to the LLC recited in instant Claim 14. As illustrated in FIG. 3, the element 15 is disposed between the rod 13 and the substrate 11. Neither Ardley *et al.* nor Hughes teach or suggest such construction.

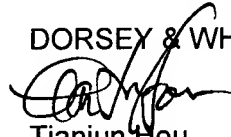
Based on the foregoing, Applicant submits that Claims 1-15, 17, 30-32, 40-46, and 59 are in condition for allowance. An early indication of the same is therefore respectfully requested. If any matters can be resolved by telephone, the Examiner is invited to call the undersigned attorney at the telephone number listed below. No fees beyond those being submitted concurrently herewith are believed due. However, the commissioner is authorized to

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charge any additional required fees, or credit any overpayment, to Dorsey & Whitney LLP,
Deposit Account No. 50-2319 (Order No. A-70277/MSS/TJH (477077-18)).

Respectfully submitted,

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